GE Oil & Gas

# Masoneilan* 21000 Series Control Valves

# fact sheet

The 21000 Series single ported unbalanced trim, heavy top guided control valves are designed with built in versatility making them well-suited to handle a wide variety of process applications. Standard features include:

## Top Guided

Rugged, heavy top plug guiding provides maximum support to ensure plug stability.

## Single and Double Stage Lo-dB*/Anti-cavitation Trim

Replacing the conventional plug with the Lo-dB/Anti-cavitation design provides excellent noise attenuation or cavitation control.

## Reduced Capacity and Low Flow Trim

A series of reduced area trim is available to provide wide flow range capabilities in all valve sizes. Optional trim to meet low flow requirements is also available.

## High Pressure Capability

A variety of actuators are available to handle low to high pressure drop requirements. Allowable pressure drops for specific leakage classes can be calculated using the Masoneilan ValSpeQ* Sizing and Selection Program.

## Tight Shutoff

Class IV leakage is standard. Optional constructions meet IEC 534-60534-4 and ANSI/FCI 70.2 Class V and VI.

## Hardened Trim

Provided as standard to handle high pressure drop applications.

## Trim Type

Standard construction offers either a quick change or threaded seat ring. This trim is unbalanced and uses no seals or pilots.

## Environmental Packing

Low emission LE* Packing is available to assure compliance with latest environmental regulations.

## Emissions Free

Bellows seal design option is available to meet zero emissions requirements.

## NACE Compliance

The 21000 Series is available for Sour Service Applications using design and construction methods in accordance with NACE Standard MR 0103. Applications requiring compliance to MR 0175, 2003 Rev or IS0 15156 require engineering review.

# fact sheet

## Specifications

### Flow Direction

| | |
|---|---|
| contoured: | flow-to-open/flow-to-close |
| Lo-dB: | flow-to-open |
| anti-cavitation: | flow-to-close |

### Body

| | |
|---|---|
| type: | high capacity globe |
| | high capacity angle |

### Bonnet

| | |
|---|---|
| type: | bolted standard |
| | bolted extension |
| | bolted cryogenic |

### Body and Bonnet

| | |
|---|---|
| materials: | carbon steel |
| | 316 stainless steel |
| | chrome-molybdenum steel |
| | others |

### Trim

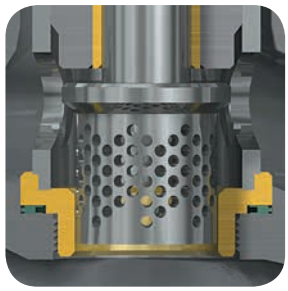
| | |
|---|---|
| plug type: | contoured |
| | soft seat |
| | Lo-dB (1 or 2 stages) |
| | anti-cavitation (1 or 2 stages) |
| seat ring: | threaded |
| | quick change |
| guide: | heavy top guided |
| capacity: | full area |
| | reduced capacity in all sizes |
| $C_V$ ratio: | 50:1 |
| flow characteristic: | linear |
| | equal percentage |
| | modified percent |

### Actuator

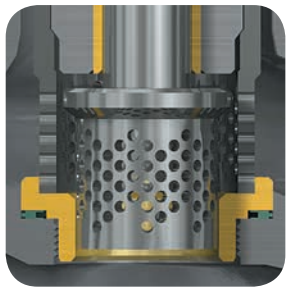
| | |
|---|---|
| type: | spring diaphragm |
| handwheel: | optional |

## LodB Trim Designs

The optional Lo-dB trim designs offer single-stage and double-stage noise attenuation benefits. Noise reduction levels of up to 25 dBA are possible, depending on the specific operating conditions.



Single-stage trim



Double-stage trim

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GEA31096 03/2014